DOCUMENT RESUME

ED 344 053 CE 060 827

TITLE Maryland Apprenticeship and Training Program. Status Report July 1, 1990-June 30, 1991.
INSTITUTION Maryland State Dept. of Economic and Community Development, Baltimore.
PUB DATE 30 Jun 91
NOTE 34p.
PUB TYPE Reports - Descriptive (141)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Accessibility (for Disabled); *Apprenticeships; Competency Based Education; Emerging Occupations; Industrial Training; *Job Training; Labor Market; Labor Supply; Marketing; Nontraditional Students; Postsecondary Education; Program Administration; Program Improvement; Skilled Workers; *State Programs; Trade and Industrial Education; Work Experience Programs
IDENTIFIERS *Maryland

ABSTRACT

During 1990-91, Maryland's apprenticeship program prepared workers for careers in highly skilled trades and crafts. Apprenticeship programs are operated throughout the state by sponsors (employers or a joint committee of employers and union representatives). Maryland's apprenticeship system provides services to the business community and individual workers. Some key figures are as follows: there was a 64% growth in apprentices during this time period; 3,075 new workers entered the system; 847 apprentices graduated to journeyperson status; there has been an increase in the participation of minorities and women in apprenticeship; there were 648 statewide sponsors; over 160 occupations were represented; and 1.049 million industrial hours of instruction were provided to 5,204 apprentices. The Maryland Apprenticeship and Training Council established three areas for improvement: target activities to areas of skilled labor shortage, improve program administration, and promote and market apprenticeship. A blueprint for action has five areas of focus: improve program quality, include emerging occupations, emphasize acquisition and demonstration of competencies, improve access to apprenticeship, and increase employer/employee participation. (Three appendices are included: council membership, related instruction for apprenticeship by participating Maryland schools, and apprenticeship demonstration projects--1991-92.) (NLA)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED344053

MARYLAND APPRENTICESHIP AND TRAINING PROGRAM

STATUS REPORT
JULY 1, 1990 - JUNE 30, 1991

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☒ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

A Theis

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

PREPARED BY:

MARYLAND DEPARTMENT OF ECONOMIC

AND EMPLOYMENT DEVELOPMENT

DIVISION OF BUSINESS RESOURCES

OFFICE OF APPRENTICESHIP

217 EAST REDWOOD STREET
BALTIMORE, MARYLAND 21201
(301) 333-5519

CE060527

BEST COPY AVAILABLE

THE MARYLAND APPRENTICESHIP AND TRAINING COUNCIL

PUBLIC MEMBERS

G. WILLIAM TROXLER CHAIRPERSON	LAUREL
JAMES A. WILLIAMS, SR.	ANNAPOLIS

EMPLOYER MEMBERS

JACK F. BECK, SR.	BALTIMORE
V. MECHELLE McCABE	LINTHICUM
PATRICIA G. MARTIN	BALTIMORE
RONNEY D. SPENCER	PRINCESS ANNE
(VACANCY)	

EMPLOYEE MEMBERS

FREDERICK JAMES BACHMAN	BALTIMORE
ELMER J. BROWN	LEONARDTOWN
BETTY ANN FIQUE	BALTIMORE
LARRY GREENHILL	METRO WASHINGTON
WILMER W. WEBSTER	BALTIMORE

EX OFFICIO MEMBERS

KATHERINE M. OLIVER	BALTIMORE
LARRY E. WARD	BALTIMORE

APPRENTICESHIP: THE CHALLENGE OF PREPARING MARYLAND'S WORKFORCE FOR THE NEW CENTURY

By William Troxler, Chairman, Maryland Apprenticeship and Training Council

Making certain that young people have jobs and that jobs are filled with quality people are essential challenges in our time. These are not simple challenges. They are fraught with risk and uncertainty. Progress is impeded by a score of events and attitudes: *There is a recession, it can wait... We never did it that way before, it won't work... Apprenticeship? That's a program for high school dropouts... Work with your hands? Oh no, my child is going to college.* Commonly, those who make these comments fail to grasp the workforce needs for the coming decade and beyond.

REALITIES FACING APPRENTICESHIP AS WE APPROACH THE YEAR 2000

- ***Diversity of the Workforce:*** Women and minorities will comprise the primary source of new entrants into the workforce. Historically, these groups have been the *least* likely to enter apprenticeship programs.

- ***Readiness for Training:*** The schooling of our young people continues to fall short of virtually everyone's hopes and goals. Worse still, too few of our young people complete high school. Apprenticeship cannot welcome dropouts who lack basic knowledge essential to the trades, such as arithmetic, reading and good work habits. Yet, before the end of the decade, the training experience of a journeyperson will equal, or exceed, the technical component of an associate's degree.

- ***Quality of This Workforce:*** Between 75% and 80% of the current workforce will still be on the job in 20 years. How can current workers be re-trained to adapt to the changes and opportunities of the next century? Will they accept and benefit from such training?

- ***Technology in the Work Place:*** Technology both invades and expands apprenticeship. New occupations are emerging due to new technology. In response to change, new trades must be offered by apprenticeship programs. A machinist today works with materials that did not exist 10 years ago. Twenty years ago, there were no computer occupations in the apprenticeship inventory. In the next decade, it is likely that computers will fundamentally alter the traditional trades.

- ***U.S. Competitiveness in the International Market:*** The competitiveness of the United States rests on more than investment bankers, appropriate legislation, international politics and energetic capitalists. To compete, our workforce must be known for its quality skills and its commitment to excellence.

The facts are overwhelming—but these are the issues of our times and *we are the people to solve them.* No one of us—no single committee we form can resolve them all. Yet let us not discount the ability of good-spirited optimists to improve matters for us all. One such dedicated group is the Maryland Apprenticeship and Training Council.

THE MARYLAND APPRENTICESHIP AND TRAINING COUNCIL (MATC)

The Council oversees 648 registered apprenticeship sponsors who support 9,192 registered apprentices in 160 occupational areas. The apprenticeship program involves both on-the-job-training and related classroom instruction. Each of Maryland's 17 community colleges provides related instruction for at least one occupation covered by the apprenticeship program.

The Council approves standards for each program that describe the goals and outcomes of the course of study and specify clock-hours of instruction, wages and the subject matter of the program. It is a tight system and the Council does a great job. But the changing workplace demands that we serve more industries and more of Maryland's potential workforce.

Recent enhancements to the Council, intended to help the Council meet these new demands, include:

- In 1989, the MATC was rechartered by the General Assembly. Membership was expanded from 10 to 12 people. Representation was diversified. The Council now has representation from labor, management, and the general public.

- The Council's traditional operating functions were expanded to include policy development. Prior to the reorganization, the Council focused on reviewing new apprenticeship programs. Today, the Council is concerned with program improvement, marketing and expansion, as well as specific program review and approval.

A NEW AGE OF APPRENTICESHIP IN MARYLAND

The Vision Statement (see page 13) is an example of how the Council is working to set goals for and give direction to the apprenticeship program in Maryland. The statement foresees a new Apprenticeship System for Maryland, including:

- developing a competency-based system which will emphasize acquiring and demonstrating mastery of necessary job skills rather than completing a minimum number of hours in training;

- improving program quality and training systems to increase the responsiveness of apprenticeship to new workplace requirements;

- changing the apprenticeship system from a system limited to traditional occupations to one that includes critical and emerging occupations driven by demands of the economy;

- increasing access of apprenticeship programs to all individuals, with a special focus on recruitment of women, minorities and youth; and

- improving marketing to increase participation in the system by both employers and workers and to change the image of apprenticeship from a rigid to a flexible system of training.

The recommendations are controversial, and the range of reactions will necessarily cut a broad path of opinion.

The Maryland apprenticeship system is one of the best in the nation and is consistently on the cutting edge of the issues. But this is not enough. *Together we must seek to make the Maryland system the model for a new age of apprenticeship training.*

STATEMENT OF ASSISTANT SECRETARY

DIVISION OF BUSINESS RESOURCES (DBR)
DEPARTMENT OF ECONOMIC AND EMPLOYMENT DEVELOPMENT (DEED)

By Dr. Audrey S. Theis, Maryland Department of Economic and Employment Development, Division of Business Resources

This report presents the status of the Maryland Apprenticeship and Training Program (MATP) at the end of fiscal year 1991. The year was a special one. Significant improvements were carried out that will make the MATP more responsive to the needs of Maryland's industries, employers, and workers now and in the near future. We also developed an enhanced vision of apprenticeship in Maryland that will guide us in making the system ready to meet the challenges of the rest of the decade and beyond.

This report shows that the "numbers" we achieved in fiscal year 1991 were good. Despite a softening economy, we added more apprentices to our rolls. Twenty-six new sponsors—the organizations that train, employ, and pay apprentices—came on board during the year. Maryland's record in attracting and training minority and women apprentices continues to far exceed the national averages, and we are proposing actions to improve access to apprenticeship for women, minorities, and the disabled in the future.

In the past year, we took actions that strengthened the MATP in the following areas:

- targeting activities and resources to areas where there are shortages of skilled labor;
- improving the efficiency and effectiveness of our administration of the program; and
- vigorously and creatively marketing apprenticeship to businesses, workers, students, and others.

The new vision that was developed during fiscal year 1991 will be the basis of a blueprint for actions that we will carry out through the rest of the 1990s so that Maryland's apprenticeship program will be positioned to meet the daunting challenges of the year 2000 and beyond. These include an increasingly diverse workforce, the continued impact of technologies on job content and related competencies, and the need for an increasingly skilled workforce so that the State's national and international competitiveness can grow. Our new vision centers on these five key areas:

- improving program quality and training systems to ensure that apprentices are ready for new workplace requirements;
- moving apprenticeship's focus to critical and emerging occupations, while advancing the quality of training for traditional occupations;
- changing apprenticeship from a time-based system to a competency-based one, to

increase the emphasis on how well apprentices demonstrate achievement of job skills rather than how long they have been in training;

- enhancing access to apprenticeship for all, particularly women, minorities and the disabled; and

- expanding our marketing of apprenticeship to increase employers' and workers' participation in the system.

The past year has been successful. The future holds even greater opportunities to make Maryland's apprenticeship system a model for the nation.

CONTENTS

Page

EXECUTIVE SUMMARY 1

APPRENTICESHIP IN MARYLAND: BACKGROUND AND STRUCTURE 3

APPRENTICESHIP IN MARYLAND: FIVE YEAR PROFILE 5

APPRENTICESHIP IN MARYLAND: RECENT ACCOMPLISHMENTS 10

APPRENTICESHIP IN MARYLAND: BLUEPRINT FOR THE FUTURE 13

Appendix A: Maryland Apprenticeship and Training Council Membership

Appendix B: Related Instruction for Apprenticeship by Participating Maryland Schools

Appendix C: Apprenticeship Demonstration Projects: 1991-92

EXECUTIVE SUMMARY

Apprenticeship is a proven method for preparing workers for careers in highly skilled trades and crafts. In 1962, Maryland's apprenticeship system was established by the Maryland legislature, which authorized the creation of the Maryland Apprenticeship and Training Council (MATC). This 12-member Council, which is appointed by Governor Schaefer with the advice and consent of the Senate of Maryland, consists of employer, employee and public representatives. Staff support to the Council is provided by the Office of Apprenticeship (OA) which is part of the Division of Business Resources (DBR) within the Maryland Department of Economic and Employment Development (DEED).

An apprentice earns wages while working full time in learning a skilled trade. Learning occurs both on the job and in the classroom. Apprenticeship programs are operated throughout the State by sponsors. A sponsor may be a single employer, an association of employers, or a joint committee of employers and union representatives.

An apprentice earns wages by working full time while learning. Learning occurs both on the job and in the classroom. Apprenticeship programs are operated throughout the State by sponsors. A sponsor may be a single employer, a union, an association of employers, or a joint committee of employers and union representatives.

The statistics at the end of fiscal year 1991 demonstrate that Maryland's apprenticeship system is vital, broadly-based, and diverse, providing services and opportunities to the business community and to individual workers. Some key figures show:

- There were 9,192 apprentices registered with the MATC at the end of fiscal year 1991. Over the past five years, this number has grown by 64.0%.

- Three-thousand and seventy-five (3,075) new workers entered the apprenticeship system in fiscal year 1991.

- Over the past five years, 4,645 apprentices have successfully completed apprenticeship programs in Maryland. In the last fiscal year, 847 apprentices graduated to journeyperson status.

- Maryland continually strives to increase the participation of minorities and women in apprenticeship. As of the end of June, 1991, 3,189 apprentices were members of minority groups, representing 34.7% of all apprentices. There were 1,102 women apprentices, representing 12.0% of the apprentice population in the State. These percentages compare quite favorably to national figures. According to the latest published statistics for the whole country, 22.5% of all apprentices were minorities and 7.1% were women.

- At the end of fiscal year 1991, there were 648 sponsors throughout the State. During the year, 26 new sponsors were registered by the MATC.

- Over 160 occupations are represented by the currently registered programs, covering all major industrial sectors in the State.

- In 1991, 1.049 million instructional hours of related instruction were provided to 5,204 men and women in a wide range of occupations.

The State has developed short-term and long-range goals and priorities for apprenticeship. In 1990, the Maryland Apprenticeship and Training Council established three areas for immediate improvement and innovation. They set goals and carried out actions to:

- Target activities to areas of skilled labor shortage.

- Improve efficiency and effectiveness of program administration.

- Promote and market apprenticeship.

To meet the needs of employers and workers for the next ten years and beyond, the State has developed a vision for apprenticeship, setting out a broadened mission with goals and actions that will be achieved in the rest of this decade. This blueprint for action has five areas of focus. They are to:

- Improve program quality and training systems to increase the responsiveness of apprenticeship to new workplace requirements.

- Broaden apprenticeship's focus beyond traditional occupations to include critical and emerging occupations identified by economic demand.

- Increase the emphasis of apprenticeship on acquisition and demonstration of competencies.

- Improve access to apprenticeship, with a special focus on recruiting women, minorities, and the disabled.

- Improve marketing to increase employers' and employees' participation in apprenticeship and highlight the system's flexibility.

The State will carry out a wide array of actions between now and the beginning of the year 2000 in these five areas, making apprenticeship an even more valuable asset in Maryland.

APPRENTICESHIP IN MARYLAND: BACKGROUND AND STRUCTURE

Apprenticeship is a proven method for preparing workers for careers in highly skilled trades and crafts. Concurrent with the rapid expansion of technology in Maryland's workplace is the need for a technically skilled workforce. Apprenticeship helps ensure a match between the Maryland business community's workforce requirements and our workforce members' skills.

> *Apprenticeship is old—a proven educational process practiced for centuries in Europe before the growth of the American economy. It is new—now providing workers who have mastered knowledge and skills demanded by new technologies.*

NATIONAL SYSTEM

Apprenticeship became a national system in the United States in 1937 with the passage of the National Apprenticeship Act (also known as the Fitzgerald Act). This Act provided for the recruitment of apprentices, the setting of performance standards and placing the national registration of programs under the direction of the Bureau of Apprenticeship and Training in the United States Department of Labor. States were encouraged to establish agencies for administering and promoting the development of apprenticeship programs.

MARYLAND'S APPRENTICESHIP AND TRAINING PROGRAM (MATP)

In 1962, Maryland's apprenticeship system was established. The Maryland legislature provided for overall direction and monitoring of these programs by establishing the Maryland Apprenticeship and Training Council (MATC). The 12-member Council, which is appointed by Governor Schaefer, consists of employer, employee and public representatives. (See Appendix A, Maryland Apprenticeship and Training Council Membership.) The Council develops apprenticeship standards and policies, approves apprenticeship programs, and issues certificates of completion to graduates.

On July 1, 1991, the Maryland Apprenticeship and Training Program was renamed the Office of Apprenticeship (OA), part of the Division of Business Resources (DBR) within the Maryland Department of Economic and Employment Development (DEED). The OA increases awareness of apprenticeship among employers and applicants, ensures quality of registered programs and the well-being of registered apprentices, coordinates and financially supports related technical classroom instruction through the State's Community College system, and collects and maintains information on the apprenticeship system.

APPRENTICES

An apprentice earns wages by working full time while learning. Learning occurs both on the job and in the classroom. The apprentice and the employer sign an agreement which specifies the duration of training and the salary to be paid during the apprenticeship. In Maryland, in fiscal year 1991, 648 sponsors participated in apprenticeship programs which were preparing 9,192

individuals for more than 160 highly skilled careers. Apprentices are awarded certificates of completion upon successfully completing an apprenticeship program. After successfully completing their training programs, apprentices become journeypersons. In fiscal year 1991, the journeyperson hourly rate of pay ranged from $8.50 per hour to $19.00 per hour.

SPONSORS

An apprenticeship program is operated by a sponsor. A sponsor may be a single employer, an association of employers, or a joint committee of employers and union representatives. Sponsors develop programs of on-the-job training (the "how-to"), based on structured training assignments under the guidance of journeyperson mentors. Sponsors also arrange for related technical classroom instruction (the "why"). The entire program must comply with standards set by the industry and approved and registered by the MATC.

RELATED INSTRUCTION

Apprentices work during the day and attend related instruction classes, typically, two nights per week. Maryland's 17 community colleges provide 99.7% of all classroom training. Fortunately, Maryland has a highly supportive and effective network of community colleges to assist in providing the knowledge base and specialized skills required by Maryland's employers. (See Appendix B, Related Instruction Offered by Participating Maryland Schools.) Today's workers need to master highly technical, mathematical, and theoretical knowledge and skills to perform successfully. Some related instruction courses may provide credits toward and Associate in Arts Degree.

RESPONSIVE SYSTEM

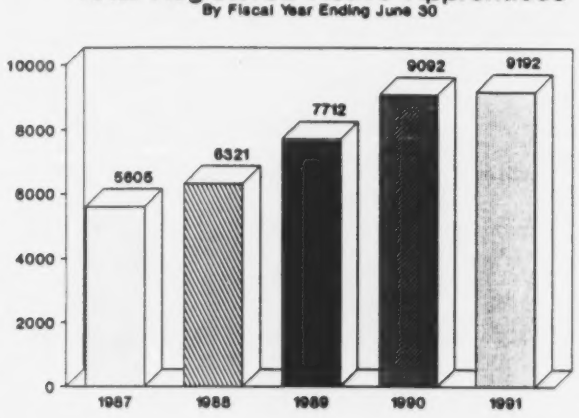
The apprenticeship system responds to workers' and employers' needs. Apprentices receive "hands on" training to learn competencies required to meet employers' job requirements. Those apprentices who successfully complete the program are awarded certificates of completion upon the recommendation of their sponsors, thus ensuring that journeyworkers have acquired the necessary skills and knowledge in the trade. New programs are established as new workforce requirements are identified.

APPRENTICESHIP IN MARYLAND: FIVE YEAR PROFILE

Maryland's apprenticeship system is broad and diverse in the opportunities it provides both the business community and individual workers. The following statistics and illustrations portray the significant characteristics of Maryland's apprentices and apprenticeship system from 1987 through 1991. The figures profile apprenticeship in the State and accomplishments achieved through the work of Maryland's apprenticeship partners—employers, unions, MATC members and DEED staff.

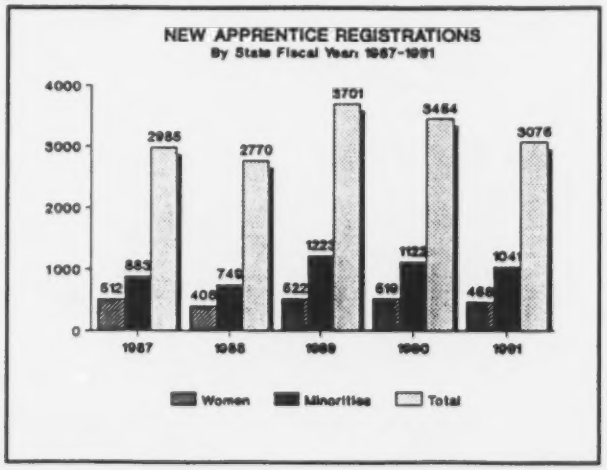
REGISTERED APPRENTICES

At the end of fiscal year 1991, there were 9,192 apprentices registered with the MATC. This represents a slight increase in the number of apprentices over the previous year, even in a period of generally slow economic growth and increased unemployment. Over the past five years, the number has grown by 64.0%, from 5,605 to the current 9,192.



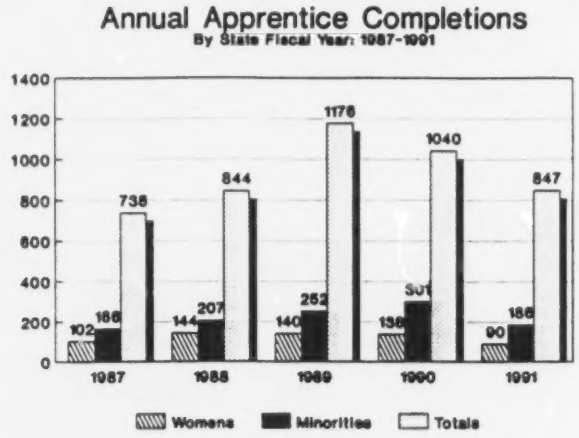
NEW APPRENTICES

New apprentices enter the system as they are registered in the many programs offered throughout the State. Three-thousand and seventy-five (3,075) new workers entered the apprenticeship system in 1991. This figure has fluctuated from year-to-year because of differing availability of openings, but the five-year trend has remained positive, showing a gain from 1987 registrations.



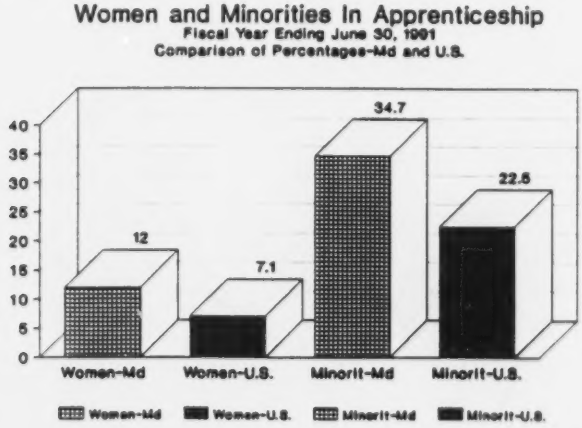
APPRENTICE COMPLETIONS

Over the past five years, 4,645 apprentices have successfully completed apprenticeship programs in Maryland. In 1991, 847 apprentices "graduated" to journeyperson status. While year-to-year completions vary because of the open-entry, open-exit nature of programs and because of the different durations of specific programs, the trend over the past five years has remained steady.

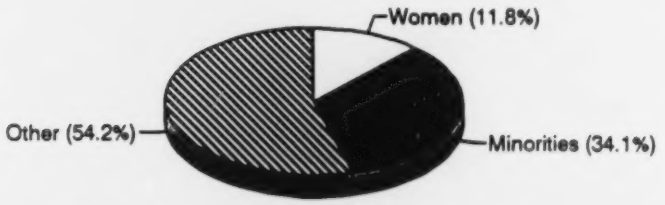


WOMEN AND MINORITY PARTICIPANTS

Maryland continually strives to increase the participation of minorities and women in apprenticeship. As of the end of June, 1991, 3,189 apprentices were members of minority groups, representing 34.7% of all apprentices. There were 1,102 women apprentices, representing 12.0% of the apprentice population in the State. These percentages compare quite favorably to national figures. As of the end of September, 1990 (the period covered by the latest published report), 22.5% of all apprentices in the U.S. were minorities and 7.1% were women (Source: U.S. Department of Labor, Bureau of Apprenticeship and Training, Apprenticeship Management Report. Note: the national figures do not include apprentices in the uniformed military services).



Women and Minorities in Apprenticeship
As a Percentage Of All Apprentices-1991



From 1981 to 1991, 4,968 of all new registrants were members of minority groups and 2,427 were women. While there have been minor fluctuations, the five-year trend for minority group member participation in new apprenticeships has been steadily upward, rising from 27.9% in 1987 to 33.9% as of the end of June 1991.

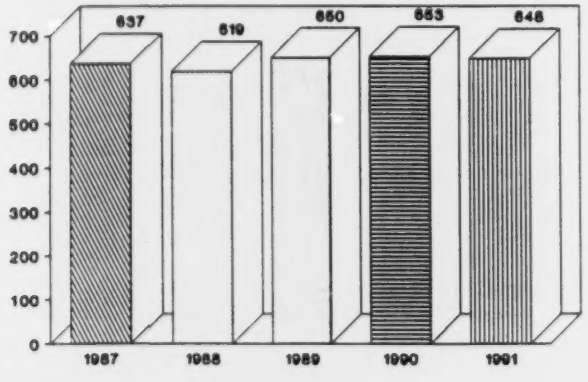
The five-year trend for participation of women among new apprenticeships has been steadily upward since 1988, although there was a slight drop from the five-year high attained in 1987.

Although Maryland has had significant success in increasing access to apprenticeship for women, the State continues to take steps to increase its success. Greater access to the system is one of the goals stated in the Vision Statement (see page 13). Two current pre-apprenticeship demonstration projects being funded also have as major objectives increased access of minorities and women to apprenticeship (see Appendix C, Apprenticeship Demonstration Project Report FY 1991 and FY 1992).

SPONSOR PARTICIPATION

The number of sponsors has increased gradually over the past five years from 637 to 648. Maryland's business community has an important stake in a rapid increase of programs. During 1991, 26 new sponsors were registered by the MATC. The opportunities offered by the new programs include not only the traditional construction trades but such diverse occupations as tool and die maker and mortician. The net number of sponsors decreased by five, due to voluntary withdrawal of previous sponsors. Expanding the number of sponsors with active programs in diverse occupations is an important goal for the Maryland apprenticeship system.

Registered Apprenticeship Sponsors
By Fiscal Year Ending June 30



GEOGRAPHICAL PARTICIPATION

Apprenticeship programs are located in nearly all geographic areas of the State. Not surprisingly, those jurisdictions with the most concentrated populations and distributions of employers are most heavily represented by programs and apprentices.

TABLE NO. 1:

APPRENTICESHIP PROGRAMS BY COUNTY

COUNTY	# OF PROGRAMS	# OF APPRENTICES
Allegany	9	253
Anne Arundel	59	510
Baltimore County	107	1815
Calvert	6	0
Caroline	5	13
Carroll	21	83
Cecil	15	64
Charles	28	109
Dorchester	11	35
Frederick	19	32
Garrett*	0	0
Harford	34	313
Howard	13	171
Kent	4	13
Montgomery	41	232
Prince George's	76	1943
Queen Anne's	8	8
Somerset	4	1
St. Mary's	22	72
Talbot	8	6
Washington	6	328
Wicomico	13	14
Worchester	4	13
Baltimore City	135	3164
TOTAL	**648**	**9192**

* Garrett Community College enrolled 30 apprentices who were registered with a multi-county sponsor headquartered in Washington County.

APPRENTICEABLE OCCUPATIONS

Over 160 occupations are represented by the currently registered programs covering all major industrial sectors in the State. The greatest number and percent of apprentices are in the construction trades, which have traditionally been the leading sector in apprenticeship in the U.S.

TABLE NO. 2:

MARYLAND APPRENTICESHIP AND TRAINING PROGRAM
TOP 20 AREAS OF TRAINING

Occupations	*Number in Training*	*Occupations*	*Number in Training*
1. Electrician	1860	11. Waste Water Treatment Technician	209
2. Police Officer	1549	12. Temperature Control Technician	165
3. Correctional Officer	1110	13. Maintenance Mechanic	147
4. Steamfitter	501	14. Operating Engineer	141
5. Carpenter	446	15. Geriatric Nursing Asst	137
6. Plumber	443	16. Insulation Worker	133
7. Sheet Metal Worker	348	17. Meat Cutter	115
8. Structural Steel Worker	274	18. Painter/Decorator	111
9. Fire Fighter	248	19. Sprinkler Fitter	108
10. Machinist	227	20. Bricklayer Cook	99 99

RELATED INSTRUCTION

Every apprentice receives some formal related instruction. More than 90% of all registered apprentices in Maryland attend related instruction in a formal classroom setting. The remainder receive instruction through in-shop classes or through correspondence courses. Most receive this instruction in Maryland's community colleges, at two University of Maryland campuses, or in vocational-technical schools at two sites. The Office of Apprenticeship (OA) grants State funds to these institutions to help defray costs of this instruction. In 1991, 1.049 million hours of related instruction were provided to 5,204 men and women covering a wide range of occupations. (See Appendix B, Related Instruction Offered by Maryland Community Colleges.)

APPRENTICESHIP IN MARYLAND: RECENT ACCOMPLISHMENTS

In 1990, the Maryland Apprenticeship and Training Council established three target areas for immediate improvement and innovation:

- *TARGET ACTIVITIES TO AREAS OF SKILLED LABOR SHORTAGE.*
- *IMPROVE EFFICIENCY AND EFFECTIVENESS OF PROGRAM ADMINISTRATION.*
- *PROMOTE AND MARKET APPRENTICESHIP.*

Key actions were carried out in 1990 and 1991 by MATC and DEED staff to keep the apprenticeship system moving forward and position it to meet the challenges in the next century.

TARGET ACTIVITIES TO AREAS OF SKILLED LABOR SHORTAGE

- ***Established 10-Year Goals:*** In order to focus apprenticeship in Maryland on the changing workforce needs of the '90s and beyond, a new mission for apprenticeship was developed. This mission targets five areas: quality; emerging occupations; industry-specific standards; open access; and a flexible, progressive system. In addition, key activities were recommended for each area as a means to achieve the goals established by the new mission.

- ***Expanded MATC Membership:*** Membership on the Council was expanded to increase representation from a broader cross-section of individuals representing Maryland's industries. For example, representatives from the machining and printing industries were added, as well as new members from the public sector.

- ***Reorganized MATC:*** The structure of the Maryland Apprenticeship and Training Council was modified to help it respond to the workforce needs of Maryland. A committee structure was adopted, enabling the Council members to divide their workload and to focus on key issues. The new committees are organized around Maryland's 10-year goals for apprenticeship, cited later in this report. The committees are: Program Committee, Emerging Occupations, Competency-based Training, Access to Apprenticeship, and Marketing. This structure is similar to those frequently found in large modern business enterprises.

- ***Phased Out Selected Funding:*** A decision was made to phase out related instruction funding for apprenticeship programs that are less than two years long. This will free funds to support the development of new apprenticeship programs that respond to existing or projected worker shortage areas or high economic and career growth areas. It will also enable more money to be targeted to high-demand, high-skill occupations such as biotechnology, electronics, or similar fields and to support programs that will provide apprenticeship opportunities for youth, women, and dislocated workers.

- ***Provided Developmental Grants:*** Programs were funded to demonstrate and test innovative approaches to apprenticeship. For example, funds were granted to Maryland Mechtech, an incorporated, non-profit consortium of small and mid-sized employers in the machining industry. This organization will test the use of a shared, rotational, on-the-job training model that makes it feasible for small and mid-sized employers to participate in apprenticeship. In addition, eight community colleges will conduct other demonstration programs in 1991-1992. (See Appendix C, Apprenticeship Demonstration Project Report, FY 1991 and FY 1992.)

IMPROVE EFFICIENCY AND EFFECTIVENESS OF PROGRAM ADMINISTRATION

- ***Integrated Apprenticeship with Other Programs:*** The integration of apprenticeship with other employment training and business resource initiatives continued at an accelerated pace. These initiatives include school-to-apprenticeship linkage models. Many workers and employers are also benefitting from this integration. For example, the Partnership for Workforce Quality program has been used to upgrade journeyworkers' abilities.

  Sharing of information, coordination of services, and integrated planning have vastly enhanced the State's responsiveness to workforce needs.

- ***Improved Information Systems:*** The dissemination of information about apprenticeship policies and program administration procedures was extensively strengthened by the adoption of an apprenticeship field information instruction (AFI) system. AFIs now rapidly convey information to all major system operators—sponsors, community colleges, vocational education staff, and others with a role in supporting apprenticeship.

- ***Improved Related Instruction Contracting:*** Contracting for related instruction in support of apprenticeship has been simplified and sharpened. Funding of contracts is now being based on more accurate and reliable information on apprenticeship enrollment and participation in related instruction classes.

- ***Coordinated with U.S. Department of Labor:*** Coordination with the U.S. Department of Labor, Bureau of Apprenticeship and Training (BAT) staff has been streamlined. This has resulted in faster and more complete service to employers and apprentices in all parts of the State.

PROMOTE AND MARKET APPRENTICESHIP

Apprenticeship is an undervalued asset for Maryland's businesses. Those who have benefited from participation in the system know its worth. The remaining businesses must be reached and convinced. The Maryland Apprenticeship and Training Council has put the marketing and promotion of apprenticeship among its highest priorities.

- ***Produced Effective Promotions:*** Attractive and engaging promotional and marketing materials have been produced. In addition to brochures, posters, and other print materials, two highly-regarded videos were produced. The videos illustrate the value of apprenticeship and let viewers know how to become involved in apprenticeship. The principal audiences for the videos are students and job-seekers.

- ***Promoted Pre-apprenticeship Programs:*** The expansion of pre-apprenticeship opportunities is underway. This is significant since pre-apprenticeship opportunities are the primary access to apprenticeship for many women and minorities. Pre-apprenticeship programs are currently operated in the printing and the building trades.

- ***Built School-Apprenticeship Linkages:*** Linkages between apprenticeship and the secondary education system continue to be expanded. Recently MATC was briefed on the many initiatives undertaken by the Maryland State Department of Education (MSDE). The Council endorsed MSDE proposals aimed at improving career education through apprenticeship linkages.

- ***Offered Apprenticeship Conferences:*** On May 3, 1991, MATC and DEED, in collaboration with MSDE and Maryland community colleges, conducted a statewide apprenticeship awareness conference. The forum targeted information to educators, career counselors, employers, job training specialists, and other human resource managers. It covered:

    - linkages between education and business;
    - recruitment and retention of apprentices;
    - access to information about apprenticeship for employers and educators;
    - career opportunities for students and others entering the workforce; and
    - networking with the apprenticeship providers in local communities.

  In addition, MATC sponsors mini-conferences which bring educators and job training staff from throughout the State together to discuss strategies for strengthening school-apprenticeship linkages.

- ***Conducted Innovative Projects:*** MATC and DEED vigorously pursue opportunities for mobilizing additional resources. DEED was one of six recipients of U.S. Department of Labor competitive grants for developing model programs to improve the transition from school to work. Apprenticeship is the cornerstone of one of the models being developed.

APPRENTICESHIP IN MARYLAND: BLUEPRINT FOR THE FUTURE

In response to new opportunities for Maryland workers and new needs of employers, MATC and DEED have updated the mission of apprenticeship in the 1990s. It focuses on providing opportunities for apprentices to achieve excellence in high skill and technical occupations which are targeted to the workforce demands of Maryland's employers.

THE FORMER FOCUS	THE NEW FOCUS
Concern with Quantity	Emphasis on Quality—*Competency Based OJT & Classroom Instruction*
Traditional Occupations	Emerging Occupations—*Market Driven & Traditional Emphasis*
Diversity of Standards	Industry-Specific Standards—*Move to Competency Testing System*
Difficult Access	Open Access—*Special Focus on More Women, Minorities & the Disabled*
Rigid, Stereotyped System	Flexible, Progressive System—*Emphasis on Opportunity and Rewarding Career*

To make this new vision a reality, MATC and DEED have developed recommendations for action for the rest of the decade.

RECOMMENDATION 1

Improve program quality and training systems to increase the responsiveness of apprenticeship to new workplace requirements:

1. Develop performance measures stressing retention, completion and skill mastery.*
2. Monitor programs against outcomes.
3. Recognize quality performance with awards.
4. Promote awarding credit for apprenticeship related instruction at community colleges.
5. Create Apprenticeship Sponsor Committees.
6. Focus on life-long learning.*
7. Improve training for DEED, sponsors, and related instruction staff.
8. Streamline administration and paperwork.
9. Improve Management Information System (MIS) and Quality Control (QC) capabilities.

* *Indicates implementation in fiscal year 1992.*

RECOMMENDATION 2

Extend apprenticeship's focus beyond traditional occupations to include critical and emerging occupations identified by economic demand:

1. Identify current and projected needs for skilled labor in Maryland.*
2. Develop strategic marketing plan for new sponsors.
3. Eliminate related instruction support for programs with fewer than 4,000 hours of on-the-job-training.*
4. Develop incentives for small and mid-sized employers to train under the apprenticeship model.

RECOMMENDATION 3

Change apprenticeship from a time-based to a competency-based system:

1. Phase in a competency based system for **all** apprenticeship programs.
2. Establish industry-validated competencies for each apprenticeable occupation.*
3. Review current curricula against industries' competency standards.
4. Establish a performance-based tracking system for apprentices.
5. Award apprentices "Certificates of Completion" upon achieving industry-established competencies.
6. Review and update curricula regularly to meet industries' changing needs.
7. Explore non-traditional technology-based methods of instruction.

RECOMMENDATION 4

Improve access to apprenticeship, with a special focus on recruiting women, minorities, and the disabled:

1. Strengthen links between apprenticeship and other employment and training systems.*
2. Increase pre-apprenticeship programs and other services through JTPA linkages that support participation by women and minorities.*
3. Expand the school-to-apprenticeship program model.*
4. Provide conferences and training on apprenticeship strategies and innovations for the appropriate professionals.*
5. Increase access to apprenticeship job information through the Apprenticeship Information Center and Job Service.
6. Expand outreach and marketing programs.

* *Indicates implementation in fiscal year 1992.*

RECOMMENDATION 5

Improve marketing to increase employer and employee participation in apprenticeship and highlight the system's flexibility:

1. Maximize the use of all media and materials to promote apprenticeship, including:
    - Public Service Announcements
    - Promotional Videos
2. Highlight monetary value, status and career ladders of technical careers.
3. Target promotional campaigns to businesses, schools, parent groups, and community organizations.*
4. Increase the involvement of the Maryland Occupational Information System to promote apprenticeship.*

* *Indicates implementation in fiscal year 1992.*

APPENDIX A: MARYLAND APPRENTICESHIP AND TRAINING COUNCIL

The 12 members of the Maryland Apprenticeship and Training Council (MATC) are appointed by the Governor, with the advice of the Secretary of Economic and Employment Development and with the advice and consent of the Senate of Maryland.

Five members are representatives of employee organizations, five members represent employers, two members are appointed from the general public. Council members are appointed to four-year terms of office. The Governor, with the advice of the Secretary of Economic and Employment Development, appoints one member to serve as the Chair and the Chair serves at the pleasure of the Governor.

PUBLIC REPRESENTATIVES OF MATC

G. William Troxler, Ph.D
President
Capitol College
11301 Springfield Road
Laurel, MD 20708

Chair of the Council, Dr. Troxler is president of Capitol College, an independent college of engineering offering associate, baccalaureate and masters degrees. He is chairman of the Federal Liaison Committee of the Engineering Technology Division of the American Society for Engineering Education. As director of the Baltimore-Washington Corridor Chamber of Commerce, he is actively involved in community affairs and serves as president of the Corridor Transportation Corporation, which provides bus service to the Greater Laurel Area. He is extremely active in education in the Prince George's County School System, and is chairing the Maryland Independent Colleges and Universities Association.

James A. Williams, Sr.
Coordinator
Adult Basic Education/Youth Work Experience
Anne Arundel County Public Schools
2644 Riva Road
Annapolis, MD 21401

Mr. Williams has been involved in the Adult Basic Education program since 1966. He has been coordinator of the combined ABE/YWE program since 1978. His work with the Anne Arundel County Public Schools program involves providing viable educational experiences for illiterate adults, GED seekers, speakers of other languages, the homeless, handicapped persons, the economically disadvantaged, and youths.

EMPLOYEE REPRESENTATIVES OF MATC

Frederick James Bachman
Training Director
Electrical J.A.T.C.
2701 West Patapsco Avenue, Suite 215
Baltimore, MD 21230

Mr. Bachman is the training director of the Baltimore and Eastern Shore Electrical Joint Apprenticeship and Training programs. He served his Electrical Apprenticeship through Local Union #24 I.B.E.W. and Maryland Chapter National Electrical Contractors Association. Mr. Bachman served for six years on the Maryland State Council on Vocational-Technical Education, is vice-chairman of the Baltimore Building and Construction Trades Training Council, and serves on several craft committees. He has also been chairman for the VICA residential wiring contest for the past eight years.

Elmer J. Brown
Program Director
St. Mary's County Housing Authority
P.O. Box 351
Leonardtown, MD 20650

Mr. Brown is the program director of the Housing Authority in St. Mary's County. He is active in his church, the Athletic Boosters, the Senior Citizen's Board of RSVP, the Citizen's Scholarship Foundation, and the Leonardtown Rotary Club.

Betty Ann Fique
Director of Administration
Sprinkler Fitters Apprenticeship Program
U.A. Local Union #536
6100 Baltimore National Pike
Baltimore, MD 21228

Ms. Fique was appointed director of administration for the Sprinkler Fitters Joint Apprenticeship and Training Committee in 1987. Prior to becoming director, she managed the U.A. Local #536 training facilities while overseeing activities of six instructors and over 60 registered apprentices. Since being appointed director, Ms. Fique has initiated many innovative courses into the five-year program as well as designing and administering a new program to teach fire fighters from Baltimore City and Baltimore, Howard and Anne Arundel Counties methods of inspecting and qualifying fire protection systems. Over 150 fire fighters and fire officers have completed the course.

Larry Greenhill, Sr.
Training Director
Washington Electricians Joint Apprenticeship and Training Committee Local #26, I.B.E.W.
6200 Kansas Avenue, N.E.
Washington, D.C. 20011

Mr. Greenhill has been involved in apprenticeship since 1978. He served for three years on the Interviewing Committee and the Apprentice Appeals Board. He was also the recording secretary on the Local #26 Welfare Monitoring Committee. Currently he serves on the following committees: Prince George's County In-School Youth Committee, District of Columbia Apprenticeship Advisory Committee, and the Board of Realtors Vocational Training Committee. Mr. Greenhill has served as chairman of the Washington Area Apprenticeship and Training Directors Association since November 1988. He is a member of the following associations: Local #26 Electrical Workers Union, D.C. Democratic Club, the Maryland NAACP and the Clinton Democratic Club.

Wilmer W. Webster
Director
Baltimore Carpenters Joint Apprenticeship Committee
9505 Harford Road
Baltimore, MD 21234

Mr. Webster has been director of the Baltimore Carpenters Joint Apprenticeship Committee for over 20 years. Before becoming director, he served as trustee and apprentice instructor for the night school, while, during the day, he was employed by the Consolidated Engineering Company as project superintendent. He is presently a delegate to the Carpenters District Council of Baltimore and Vicinity, trustee to the Carpenters Local Union 101, member of the Baltimore Building Trades Council, and an executive board member for the construction technology program of Howard County Community College.

EMPLOYER REPRESENTATIVES*

Jack F. Beck, Sr., P.E.
President
Enterprise Electric Company
4204 Shannon Drive
Baltimore, MD 21201

Mr. Beck, president of Enterprise Electric Company, is the chairman of the Joint Apprenticeship and Training Committee for Local Union #24 I.B.E.W. and National Electrical Contractors Association, Maryland Chapter. He has also completed terms as past president and governor of the Maryland Chapter of the National Electrical Contractors Association.

V. Mechelle McCabe
Partner
Tinker Machining Co., Inc.
107 N. Hammonds Ferry Rd.
Linthicum, MD 21090

Ms. McCabe, a partner in Tinker Machining Co., functions as secretary and treasurer. She is responsible for proactive technical sourcing and staffing, job fairs, and liaison activity with State vocational offices. Ms. McCabe has held the positions of president and vice president of the Maryland Chapter of the National Tooling and Machining Association. She is a member of both the Northern Anne Arundel County and the U.S. Chambers of Commerce. She is also active in the Linthicum Elementary School PTA.

Patricia G. Martin
Vice President
Printing Industries
of Maryland
2433 Maryland Avenue
Baltimore, MD 21218

Ms. Martin is vice president of the trade association representing the graphics arts industry in Maryland. A major portion of her job responsibility entails the development of educational programs for the members of the association. She has served as president of the Graphic Arts Institute of America, a consortium of graphic arts educators, and the Maryland Society of Association Executives.

Ronney D. Spencer
Professor
University of Maryland,
Eastern Shore
Post Office Box 308
Princess Anne, MD 21853

Ronney D. Spencer has been a member of MATC since 1986. He is a professor of Construction Management at the University of Maryland Eastern Shore. Mr. Spencer was a U.S. Army Paratroop Ranger from 1957-1971. He served as the ABC Eastern Shore executive director from 1982-1990, and has completed terms as commander of the VFW Post 9505, board member of the Somerset Cooperative Extension Service, past treasurer of the Somerset Chamber of Commerce, and as a board member of Shore Up, Inc. in Salisbury, Maryland. Currently he is president of the Princess Anne Civic Center Board of Directors.

* *There is one Employer Representative vacancy.*

EX OFFICIO MATC MEMBERS

Katherine M. Oliver
Assistant State Superintendent
Career and Technology
Education, MSDE
200 West Baltimore Street
Baltimore, MD 21201

Ms. Oliver has been a member of the Maryland State Department of Education since August 1973 and was associated with its Division of Vocational Rehabilitation prior to her appointment in October 1989 as the Assistant State Superintendent, Division of Career and Technology Education. She is active with numerous boards and associations dealing with education, business, and industry.

Larry E. Ward
State Director
U.S. Department of
Labor/Bureau of
Apprenticeship and Training
1028 Federal Building
31 Hopkins Plaza
Baltimore, MD 21201

Mr. Ward is the State Director for Maryland of the U.S. Department of Labor's Bureau and Apprenticeship and Training. He manages the efforts of Bureau staff concerned with those Maryland apprenticeship programs registered with the Federal Government. In his role as State Director and as a member of the Council, Mr. Ward coordinates closely with State of Maryland apprenticeship program staff. Formerly a highly skilled worker in the marble/stone masonry trade, Mr. Ward has been with the Bureau of Apprenticeship and Training since 1972, ascending from the position of Apprenticeship Training Representative to his current position as State Director.

APPENDIX B: RELATED INSTRUCTION OFFERED BY PARTICIPATING MARYLAND SCHOOLS IN FISCAL YEAR 1991

Maryland's schools provided a total of 1,049,111 hours of related training to 5,204 apprentices in fiscal year 1991. They have offered quality course work to apprentices in many diverse occupations.

Allegany Community College

Allegany Community College had 211 apprentices who attended 34,380 hours of related instruction. The eight programs available are primarily construction trades.

Anne Arundel Community College

Anne Arundel Community College provided 60,386 hours of related instruction to 375 apprentices and has received a grant of $10,200 for a demonstration project described in Appendix C. Of the 20 programs for which Anne Arundel Community College provides related instruction, most are public health and safety occupations and construction trades. In addition, the college offers related instruction in: auto mechanic, boat joiner, electronic technician, shipfitter, landscaping/horticulturist, and water treatment and pollution control.

Catonsville Community College

Catonsville Community College offered related instruction to 1,376 apprentices in 24 programs. The most significant number of the programs were in the construction trades, followed by machining trades and public health and safety occupations; other related instruction also offered by the college included auto mechanic and graphic arts. The total number of hours of related training provided by the College was 316,074. Catonsville Community College was also awarded a $14,927 grant to fund a demonstration project. (See Appendix C.)

Cecil Community College

Cecil Community College provided 3,330 hours of related instruction to 22 apprentices in the electrician program.

Charles County Community College

One hundred and forty-eight apprentices received 23,672 hours of related instruction at Charles County Community College. The 21 programs were predominantly public health and construction trades, but related instruction was also available for the following trades: electronic technician, housekeeper, machinist, office machine service, oil burner service technician, power line technician, printer, and quality control inspector.

Chesapeake College

A total of 8,208 hours of related instruction was rendered to 54 apprentices in five programs at Chesapeake College. Courses were offered in the following trades: electrician, machinist, natural resource police officer, tool and die maker and welder. The institution was also awarded a grant of $9,037, to develop a pre-apprenticeship demonstration project. (See Appendix C.)

Community College of Baltimore

The Community College of Baltimore supplied related instruction courses for 14 apprenticeship programs. There were 116 apprentices enrolled for a total of 25,700 hours of training. Instruction was available for the following programs: cabinetmaker, electrical maintenance, food service technician, maintenance mechanic, mechanical maintenance, painter, police officer, pump station technician, pump technician, stationary engineer, tree trimmer and, waste water and water treatment plant operator.

Dundalk Community College

The Dundalk Community College furnished 149 apprentices with 35,195 hours of related instruction. The 23 programs available encompassed many construction trades, and a few machining trades. The remaining trades were: container/chassis mechanic, electronics technician, instrumentation technician, ironworker, process technician program, refrigeration mechanic, shipfitter and stationary engineer. Dundalk Community College received $73,441 in grant money to provide oversight and a final report of the demonstration projects described in Appendix C.

Essex Community College

There were 810 apprentices who participated in 19,699 hours of related instruction in five programs at Essex Community College. Three of the five programs were in the construction trades and the remaining were courses for public safety apprentices. Essex Community College is also involved in the demonstration project and received a grant of $5,700. (See Appendix C.)

Frederick Community College

Related instruction was provided by Frederick Community College to apprentices in 10 trades—nine of which were in construction, the other was instrument technician. The college served 87 apprentices who received 13,269 hours of instruction.

Garrett Community College

Garrett Community College provided 30 apprentices with 4,320 hours of related instruction. All six programs offered by Garrett Community College were in the construction trades.

Hagerstown Junior College

Two hundred and seventy-seven apprentices accrued 42,966 hours of related instruction in nine trades at Hagerstown Junior College. Six of the programs were construction trades. The remainder were ironworker, meatcutter and upholstery repairer.

Harford Community College

At Harford Community College 250 apprentices received 40,767 hours of related instruction in four trades. Of the six programs offered only three were funded in 1991. Two of the funded programs focused on construction trades, the other offered police officer training. The programs available, but unfunded, included nursing, automotive technology and HVAC mechanic.

Howard Community College

The 46 apprentices at Howard Community College completed 8,280 hours of course work in the following programs: assistant manager (restaurant), culinary apprentice, HVAC mechanic and plumber. The institution was also a recipient of a $3,800 grant for participation in a demonstration project. (See Appendix C.)

Montgomery Community College

Montgomery Community College provided related instruction for 21 apprenticeship programs. The institution had 520 apprentices, who participated in 105,030 hours of related instruction. The programs offered by Montgomery College were primarily construction trades, but included public health and machinist occupations as well as electronic technician, stationary engineer (boiler room), steamfitter and utility system repair operator. In addition, the school is active in two demonstration projects and received a grant of $22,800 for its participation. (See Appendix C.)

Montgomery County Public School System

The Montgomery County Public School System served 16 apprentices in construction trades and automotive technology apprenticeship programs, providing 2,358 hours of related instruction. Also available but not funded in 1991 were electrician programs.

Prince George's Community College

Prince George's Community College served 671 apprentices who obtained 122,938 hours of related instruction. Of the 15 programs offered most are construction trades and the remainder are health and public safety occupations. The institution is involved in a demonstration project, and was the recipient of a $8,660 grant. (See Appendix C.)

University of Maryland—College Park

The College Park campus of the University of Maryland provided 44 apprentices with 7,392 hours of related instruction. The nine programs offered represented the construction trades most heavily, but also included: auto body repair, auto mechanic, locksmith, steamfitter and temperature control technician.

WOR-WIC Tech Community College

WOR-WIC Tech Community College offered six programs which covered the machining trades, the construction trades and public health and safety occupations. Twenty-four apprentices received 4,536 hours of related instruction.

APPENDIX C: APPRENTICESHIP DEMONSTRATION PROJECT REPORT—FY'91 AND '92

This is a brief overview of the demonstration projects awarded by the Department of Economic and Employment Development (DEED), Maryland Office of Apprenticeship. The demonstrations are a result of a Request for Proposals (RFP) offered in March 1991 by the Department. The purpose is to test approaches under the five recommendations listed on page 13.

I. Demonstration Awards:

A. Qualified Under Recommendation 3

1. "DACUMS" - Develop a Curriculum

Anne Arundel Community College - Electrical
Catonsville Community College - Tool and Die and Machine Tool
Prince George's Community College - Sheet Metal
Dundalk Community College - DACUM Coordination, Oversight and Final Report

Each college will conduct a DACUM focusing on the occupation identified. The process and procedure generally takes two or three days to accomplish. Representatives on the panel will include journeypersons from the specific industry, apprenticeship instructors, sponsors, education officials, and others deemed appropriate. The purpose of the DACUM is to reassess the curriculum in a structured and systematic way to determine if it continues to meet industry innovations and training needs, and to establish the basis for a core set of competencies that could be adopted across the industry. At the conclusion of this coordinated, but independent research, Dundalk Community College's DACUM Resources Center will provide DEED/Office of Apprenticeship with a final report and recommendation.

Contact Person: Dennis M. Faber, DCC. (301) 282-6700

B. Qualified Under Recommendation 4

1. Pre-Apprenticeship Project

Chesapeake Community College

This project will span FY'91 and FY'92. Its purpose is to increase opportunities for women and minorities to enter apprenticeship programs in the machine tool trades. Course work will include 180-240 hours of curriculum. The project was designed in conjunction with a local employer, Dixon Valve and Coupling, Inc., and the Upper Shore Private Industry Council. The PIC/SDA has agreed to identify, screen and test perspective students from Project Independence (P.I.), and Dislocated Worker Programs. In addition, they will provide transportation

support, child care, stipends, and offset other student-related expenses. Dixon Valve has agreed to hire students who complete the program and meet its employment standards.

Contact Person: Ellen Long (301) 822-5400

2. Pre-Apprenticeship Project

Montgomery Community College

Gateway to the Apprenticeship Trades (GAT) is a project designed to attract women and minorities to careers in the skilled trades. Students will be selected from Job Training Partnership Act (JTPA) clients, P.I., and dislocated worker populations. The Montgomery County Employment and Training Division will provide students with transportation and stipends. Course work will include math, blueprint reading, communication skills, knowledge of tools, and the work environment, which includes 13 field trips to apprenticeship sponsor locations. Classes will be held three days a week for 14 weeks. A counselor will be assigned to assist students in applying for apprenticeship opportunities.

Contact Person: Carol Rohr, Director (301) 251-7937

C. Qualified Under Recommendation 5

1. Skilled Workers Emeritus Program

Montgomery Community College

The purpose of this project is to promote occupations in the skilled trades, and to enlighten young people about the advantages of a technical career. This program will employ retired journeypersons to market the apprenticeable trades in the community. A Planning Committee made up of representatives from schools, vocational-education institutions, unions, businesses, JTPA-MET, and other interested individuals will provide coordination and oversight. Twenty retired journeypersons will be identified to work in assigned geographical regions.

Contact Person: Elaine Amir, Director (301) 251-7490

D. Qualified Under Recommendation 1

1. Instructor Training and Certification

Essex Community College

Apprenticeship instructors, by tradition, have come through the ranks of the skilled trades to become teachers. Most have long and extensive hands-on careers in their field but more limited exposure to formal teaching and training. Many have expressed a desire for professional development opportunities to improve their skills and credentials. Essex Community College proposes to do an in-depth analysis of the certification process in other teaching fields, to design a set of teaching objectives, to create training materials, to conduct a workshop, and to develop final certification criteria to be approved and used statewide.

Contact Person: Bert Cooperstein, Apprenticeship Training (301) 522-1619

E. Qualified Under Recommendation 5

1. Marketing Materials

Howard Community College

Howard Community College, in cooperation with the Heating, Ventilation and Cooling (HVAC) Industries, is jointly developing and distributing a brochure designed to attract interest in the occupation. This brochure will be distributed throughout the county school system and other target locations.

Contact Person: Carol Keyser (301) 992-4808

F. Qualified Under Recommendation 5

1. Marketing Brochure

Dundalk Community College

The principal product of this effort is the development of a brochure designed to attract parents and students to apprenticeship as a valuable career choice. This statewide marketing and information tool will give information about apprenticeship and promote its advantages as a pathway to significant and rewarding jobs.

Contact Person: Michael Galiazzo (301) 282-6700